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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,093	12/02/2003	Gary K. Lund	2507-6011US (22032-US)	6000
60794	7590	05/29/2007		
TRASKBRITT, P.C./ ALLIANT TECH SYSTEMS			EXAMINER	
P.O. BOX 2550			HWU, DAVIS D	
SALT LAKE CITY, UT 84110				
			ART UNIT	PAPER NUMBER
			3752	
			MAIL DATE	DELIVERY MODE
			05/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/727,093		LUND ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Davis D. Hwu		3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-65, 67-77 and 80-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27, 61, 64, 65 and 67 is/are allowed.
- 6) ☒ Claim(s) 1-16, 18-20, 24, 26, 28-53, 55-58, 60, 62, 63, 68-77, 85, 86 and 88-90 is/are rejected.
- 7) ☒ Claim(s) 17, 21-23, 25, 54, 59 and 87 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/10/07</u>   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-16, 18-20, 24, 26, 28-53, 55-58, 60, 62, 63, 68-77, 85, 86, and 88-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotliar in view of Johnson et al.

Kotliar discloses a fire suppression apparatus comprising a housing defining a first opening therein, a second opening therein and a flow path providing fluid communication between the first opening (at 21) and the second opening (at 23), a gas generating device 24, and a oxygen-getting device 20 disposed in the flow path. Kotliar does not disclose a gas-generating device as recited. Johnson et al. teach a gas-generating device that produces a flow of gas which draws a volume of ambient air into the device. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Kotliar by replacing the gas generating device with a gas generating to draw a volume of ambient air as taught by Johnson et al. Johnson et al. also teach a nozzle that accelerates the flow of the first gas to a supersonic velocity and the gas-generating device including a solid propellant as recited in claims 3-5. The gas generated as recited in claim 7 would have been a matter of design choice since the solid propellant has already been taught. Kotliar also

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discloses a filter as recited in claim 13. The type of filter as recited in claim 14 would have been a matter of design choice. Johnson et al. also teach a diffuser 154 as recited in claim 15. The type of material as recited in claims 19, 30, and 31 would have been design choice. Making parts removable as recited in claims 28 and 32 would have been obvious to one having ordinary skill in the art in order to be able to replace the parts. Regarding claim 29, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. Having a controller as recited in claim 36 is obvious in order to detect an event and activate the apparatus. The use of smoke detectors, temperature sensors, and other gas sensors and fire alarms are known in the art.

***Allowable Subject Matter***

3. Claims 17, 21-23, 25, 54, 59, and 87 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. Claims 27, 61, 64, 65, and 67 are allowed.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis D. Hwu whose telephone number is 571-272-4904. The examiner can normally be reached on 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval

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(PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**DAVIS HWU**  
**PRIMARY EXAMINER**